

Electric Service Quality Rulemaking Data Request

Reliability:

The area of reliability will include the examination of sustained outages, momentary outages, restoration of service following a sustained outage and power quality.

1. Is your utility participating in any EPRI (or other organizations) research projects relating to reliability or other service quality issues? If yes, please describe the project(s) you are involved in and how it relates to reliability issues addressed in this section of the data request.

Service Interruption and Outages

Sustained Outages:

1. How does your utility identify an outage? At what point does your utility consider an outage a “sustained” outage versus a “momentary” outage?
2. Please describe the response process once an outage is identified. Has your response process changed in any way over the past 5 years? Please explain those changes. What follow-up is done after service has been restored to determine that an individual customer, once again, has electric service?
3. Under what conditions or circumstances does your utility report an outage to the Commission? Since January 2001, how often have you reported an outage to the Commission? How often did you provide updates on the outage and the restoration of service?
4. Outages resulting from major weather events can somewhat be anticipated, please describe the weather event outage response from the time a weather situation is known or anticipated to exist through the time the last customer is brought back online. Please describe any facilities and/or procedures that are specifically used in anticipation or during a major weather event in case of widespread outages. Are the facilities and/or procedures different depending on the type of weather event, for example tornado conditions versus a potential ice storm? Are there non-weather related outage situations when these facilities and/or procedures are used?
5. What other government (local, state, federal) agencies or organizations **must** your utility interact or communicate with during outage situations? Specifically, are there other agencies or organizations that your utility is required by law or regulation to report to or communicate with during outage situations?
6. Are there other agencies, organizations or companies that your utility typically interacts or communicates with during critical outage situations? Please describe the circumstances and types of interactions or communications that occur.
7. What is the policy concerning the use of service crews from other utilities? Has the availability of crews or the willingness of other utilities to make crews available become more limited in recent years? Are non-utility crews being used or considered more routinely than requesting crews from neighboring utilities?

8. What type of information does your utility typically gather/report/analyze regarding sustained outages? How is this information used in the utility?
9. Does the utility attempt to quantify the financial costs of outages to customers and local communities? If so, please explain how this is done.

Momentary Outages:

1. Does your utility identify and track momentary outages? How is a momentary outage identified and/or defined?
2. What type of information does your utility typically gather/report/analyze regarding momentary outages? How is this information used in the utility?
3. Other than the duration of the outage, are there operational or characteristic differences in a sustained outage versus a momentary outage?

Performance Measures and Statistics

1. Typical reliability performance statistics include SAIDI, CAIDI, SAIFI, etc. Does your utility routinely calculate these statistics? How is each of the variables in each of the calculations defined? Are these statistics calculated as part of your outage management system or through some other means?
2. Are there other reliability statistics your utility calculates? What are they? How are they calculated? How are the variables used to calculate them defined? Are these statistics calculated as part of your outage management system or through some other means?
3. Does your outage management system calculate other reliability statistics that your utility does not routinely review? What are these statistics? How are they calculated? How are the variables used to calculate them defined?
4. Reliability statistics are often calculated excluding storms or other major outage events. What are the advantages and disadvantages to excluding storms or other events? Do reliability statistics typically calculated by your utility include or exclude storms or major outage events? If these events are excluded, how do you determine when to exclude an outage event? How do you define the different levels of outage events?
5. How do service territory differences (e.g., rural versus metropolitan, high industrial concentration versus more residential) affect the calculation of reliability statistics? What statistic, if any, is most indifferent to the service area characteristics, in other words, what statistic(s) would most likely allow relevant comparisons among a wide variety of utility types?
6. Can the calculation of reliability indices be standardized among Indiana utilities? Please explain how that might be done.

7. Should utility size or other characteristics be taken into consideration when evaluating the reliability statistics from a company?
8. Are performance evaluations and the resulting compensation for any individual, groups of individuals or divisions of the utility tied to reliability statistic results? Please explain what reliability statistics are used and who is evaluated based on the results of those statistics. How are the acceptable levels of performance set and what are those levels?

Worst circuits

In order to prevent utilities from having “pockets” of poor service reliability, some state commissions require utilities to report the top 10-25 worst circuits and then address those problem areas.

1. Are there areas of your utility’s service territory that are more prone to outages, either sustained or momentary, or other reliability problems, such as power quality, than others? How does your utility address this type of problem?
2. What are the advantages of identifying the top worst performing circuits of a utility?
3. What are the disadvantages of identifying the top worst performing circuits of a utility?

Power Quality

1. Based on your utility’s interaction with its customers, is power quality an important concern of your customers? What aspects of power quality are of particular concern (voltage sag, high or low voltage, voltage spikes and transients, flickers, surges, harmonics, other)? Please explain. Are there typical types of customers or customer classes that voice a greater concern about power quality than others? Please explain. How has your utility addressed these concerns?
2. Does your utility have any program or plan in place specifically addressing power quality issues? Please explain. How have these programs or plans changed over the last five years?
3. Does your utility collect/track any type of power quality related data? If so, what data is collected and how is it used by the utility?
4. Is power quality data used as a performance measure for compensation for any person(s), groups and/or divisions in your utility? Please explain what data is used and why.

Leading Indicators

While it’s important to restore service as quickly as possible following an outage, when practical, it is better to prevent the outage from occurring.

1. What are good leading indicators of possible service outages? Does your utility routinely monitor specific aspects of the electric operations or system with the goal of preventing service outages? What do you monitor and why?
2. Does your utility have a routine inspection and maintenance plan/procedure in place designed to prevent the possibility of service outages? Please explain the plan/procedure.

3. Has this plan/procedure changed in the past five (5) years? Please explain the changes and why they were made.
4. Has your utility made any study or analysis as to how successful your inspection and maintenance plan/procedure has been in preventing service outage? Please explain.
5. Does your utility have a vegetation management plan/procedure in place designed to prevent the possibility of service outages? Please explain the plan/procedure.
6. Has this plan/procedure changed in the past five (5) years? Please explain the changes and why they were made.
7. Has your utility made any study or analysis as to how successful your vegetation management plan/procedure has been in preventing service outage? Please explain.
8. Does your utility identify/track the age of equipment used in the production and delivery of electricity to the customer? Why or why not?
9. Could equipment age be used as a leading indicator of potential service outages? Would this be an effective indicator of potential service outages? Please explain.
10. Does your utility track equipment used in the production and delivery of electricity to the customer to identify equipment that tends to have a premature or unpredicted failure rate or degraded performance level? Why or why not?
11. Could the identification of equipment with premature or unpredicted failure rate or degraded performance level be used as a leading indicator of potential service outages? Would this be an effective indicator of potential service outages? Please explain.
12. Are there any other methods (e.g., infra-red inspections or radio frequency inspections) you carry out to help maintain and/or improve system reliability? Please describe the methods you use.

Setting Performance Standards

1. Does your utility set any type of performance standards relating to service reliability and quality as a method of determining employee and/or division performance for compensation purposes? What are these standards? How are they measured? How do they affect the overall compensation for a(n) employee and/or division?
2. Could similar standards be set by the Commission to help evaluate and compare the service quality of Indiana utilities? Please explain why or why not.
3. If these standards are not appropriate to help evaluate and compare the service quality of Indiana utilities, please suggest some standards that would be appropriate.

4. To date there has been little or no use of I. C. 8-1-2.5 by utilities to propose performance based rates that would tie utility incentives/penalties to reliability and other measurable performance criteria. Is there a problem with how I. C. 8-1-2.5 is structured that makes it inappropriate or ineffective as a vehicle for performance based rates? Please explain. From your perspective (utility, customer group, other) what are the pros and cons of performance based rates?

Safety:

1. Is your utility participating in any EPRI (or other organizations) research projects relating to safety? If yes, please describe the project(s) you are involved in and how it relates to safety issues addressed in this section of the data request.
2. What actions to ensure public safety are taken, both by the utility and other emergency resources, when a live power line has come down? Please explain the activities from the time a live power line is reported down until it has been repaired or rendered safe.
3. In situations where live power lines may be down in multiple locations, how is public safety ensured?
4. In critical weather situations where widespread areas may experience outages or down power lines, is there any central coordination (beyond each individual utility) of the restoration of service and the repair of down lines? Please explain who does the coordination and what organizations are involved.
5. What could be done to improve the public awareness of the hazards that may exist as a result of weather related power outage? How does your utility inform customers of these types of hazards?
6. What is the most typical accident involving utility facilities that happens to utility personnel and to non-utility/customers/the general public? What has your utility done to help try and alleviate these types of accidents?
7. What is the current average term of employment for service and line crew personnel? Does your utility provide on-going safety training for your line and service crews? Please explain the types of training these crews receive.
8. Commission rules currently require utilities to report accidents resulting in death. Do you think this rule provides useful information to the Commission? Please explain. Do you have any recommended changes that would make this rule more useful? Please explain.
9. What other organizations or agencies must you report to when there has been an accident, injury or fatality? Please explain what must be reported, under what circumstances and in what time frame from when the incident occurred.
10. The Commission is aware that in preparation for Y2K utilities developed emergency operating plans (EOP). Does your utility continue to maintain and update an emergency operating plan? What circumstances or conditions is the EOP designed to cover? Is the EOP prepared and/or

modified completely by utility personnel or do other organizations or agencies have input to the plan? Please explain how outside sources have input to the EOP. Does your utility routinely run drills on the EOP to check the effectiveness of the plan and to identify areas, which need improvement? Please describe your drilling procedure.

Customer Service:

1. Is your utility participating in any EPRI (or other organizations) research projects relating to customer service? If yes, please describe the project(s) you are involved in and how it relates to customer service issues addressed in this section of the data request.
2. Please describe your utility's customer service philosophy and how your utility implements this philosophy.
3. How many employees are directly engaged in customer service types of activities and where do they fit in the utility's overall organizational structure? An organizational diagram maybe useful in responding to this question.
4. Assuming there are a variety of activities that can be considered "customer service" please describe the different types of activities your utility classifies as "customer service" and how many employees are engaged in each activity.
5. Please provide a brief description of the qualifications required by employees engaged in the various customer service activities described in response to the previous question. Have these requirements and protocols changed over the past five years? Please explain.
6. Please describe any equipment and/or facilities that are specifically designed to help the utility to communicate with its customers and to enhance customer service.
7. How does your utility evaluate the quality and performance of your customer service activities?
8. Is the compensation of employees, groups of employees or divisions tied to customer service performance? Please explain how this is done and whom this process affects.
9. What methods or statistics are used to evaluate customer service performance? Please provide a description of the methods or statistics used.